

## Appendix L

## Sprint's Report to the FCC on VRS and IP Waivers



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## FCC Internet and Video Relay Service Annual Progress Report April 16, 2007

Waivers	IP Regulatory Status	IP Current Technology Issue/Limitations	Progress and Steps Taken to Meet the Requirement	VRS Regulatory Status	VRS Current Technology Issue/Limitations	Progress and Steps Taken to Meet the requirement
1. STS	Waived through 1/1/08	STS is not possible over the internet. Voice over IP (VoIP) **REQUIRES** Quality of Service. QoS means that all the associated data packets arrive in one contiguous stream and in order. In the "internet" world, there are many segments owned by multiple providers using dis-similar routers. Some support QoS, some do not. There is, at this time, no universal, cooperative methodology to address the internet deficiencies.	In research and development stage. Sprint is investigating and evaluating several VoIP to determine acceptable QoS levels to support STS calls. Sprint is also investigating LAN/WAN systems where QoS can be controlled internally.	Waived Indefinitely; No report required	NA	NA
2. Spanish Relay	NA	NA	NA	Compensable but non-mandated service.	NA	Sprint provides ASL to Spanish Video Relay Service.
3. Types of Calls	NA	NA	NA	Waived through 1/1/08	Voice over IP(VoIP) requires Quality of Service. QoS means that all the associated data packets arrive in one contiguous stream and in order.	We are currently providing two-line VCO and HCO controlled at the agent position using IP or ISDN inbound from Video user and



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VValvCl3	Regulatory	Technology	Steps Taken	Regulatory	Technology	Steps Taken
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			Requirement			requirement
			Requirement		In the "internet" world, there are many segments owned by multiple providers using dis-similar routers. Some support QoS, some do not. The internet cannot be controlled by any single user. There is, at this time, no universal, cooperative methodology to address the internet deficiencies.  Sprint offers alternatives VCO and HCO solution by using second line (analog line) where the Video Interpreter asks for a second number to call back using three-way call feature. The procedure is similar to two-line VCO or HCO call.	outbound POT S to Video user and outbound POTS to Voice user. One line VCO and HCO began in 2005. This is limited to certain types of end user appliances that allow voice access through the broadband connection at end user equipment.
4. Emergen cy Call Handling	Waived through 1/1/08	Internet Protocol network (IP network) does not support the Automated Number Identification information for Internet or Video Relay Services. Without automated knowledge of the originated location of the call, Sprint is not in position to	Sprint implemented a "manual" (directory assistance lookup) process for 911 calls through Internet Relay. The technical challenge remains of tying an exact location to an IP address.	Waived through 1/1/07	Internet Protocol network (IP network) does not support the Automated Number Identification information for Internet or Video Relay Services. Without automated knowledge of the originated location of the call, Sprint is not in position to	No additional information to submit beyond our recent submission to the FCC. Current options may restrict interoperabilit y. An Emergency database is still in use today for subscribers



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		transfer 911 calls to an appropriate PSAP.	No additional development has been made that would allow Internet Relay users to place 911 calls through Internet Relay.		transfer 911 calls to an appropriate PSAP.	who choose to register a profile; however, agents must verify the location of the caller, as the caller may not be at the same physical location as the profile indicates.
5. Speed of Answer	NA	NA	NA	1/1/07- 80% of all calls within 120 seconds (monthly).	Sprint is exceeding the 80/120 service level requirement that went into effect January 1, 2007.	Sprint will continue to meet the requirement measured on a monthly basis.
6. Equal Access to Interexch ange Carrier	Waived Indefinitely; No report required	NA	NA	Waived through 1/1/08	The IP network does not support ANI and enduser billing mechanisms. Without automated knowledge of ANI location, and without an ANI to charge back for tolls calls, Sprint cannot support equal access to interexchange carrier features for Video Relay Service.	The technical challenge remains of tying an exact location to an IP address for VRS users. However, the very nature of the internet makes billing for toll calls obsolete.
7. Pay- per-call (900) Service	Waived through 1/1/08	IP network does not support ANI and end-user billing mechanisms. Without automated knowledge of ANI location, and no ANI to charge back for a payper-service call, Sprint is not	The technical challenge remains of tying an exact location and billing of payper-call. No additional development has been made that would allow Internet Relay	Waived through 1/1/08	IP network does not support ANI and end-user billing mechanisms. Without automated knowledge of ANI location, and no ANI to charge back for a payper-service call, Sprint is not	The technical challenge remains of tying an exact location and billing of payper-call. No additional development has been made that would allow Video Relay



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			Requirement			requirement
		processing 900	end users to		processing 900	end users to
		calls.	be billed for		calls.	be billed for
			pay-per-call services.			pay-per-call services.
			services.			Services.
8. Voice Carry Over (VCO) (one- line)	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint is investigating and evaluating several VoIP alternatives to determine acceptable QoS levels to support Voice carry-over calls. Sprint is also investigating LAN/WAN systems where QoS can be controlled internally.	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint is currently providing two-line VCO controlled at the agent position using IP or ISDN inbound from Video user and outbound POT S to Video user and outbound POTS to Voice user. One line VCO, released in 2005, is limited to certain types of end user appliances that allow voice access through the broadband connection at end user
9. Hearing Carry Over (HCO) (one- line)	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint is investigating and evaluating several VoIP alternatives to determine acceptable QoS levels to support Hearing carryover calls. Sprint is also	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	equipment.  Sprint is currently providing two-line HCO controlled at the agent position using IP or ISDN inbound from Video user and outbound POT S to Video
			investigating LAN/WAN systems where QoS can be controlled internally.			user and outbound POTS to Voice user. One line HCO, released in 2005, is



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						limited to certain types of end user appliances that allow voice access through the broadband connection at end user equipment.
10. VCO – to - TTY	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Internet Relay Service is not designed to connect an inbound internet caller with the called party who uses TTY user or VCO as communicatio n between internet and baudot protocols are not compatible.	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Video Relay Service is not designed to connect an inbound video caller with the called party with uses voice, TTY user, VCO, HCO or anything other than video because. the videoconferen cing via internet or ISDN protocols are not compatible.
11. HCO - t o- TTY	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Internet Relay Service is not designed to connect an inbound internet caller with the called party who uses TTY user or HCO as communicatio n between internet and baudot protocols are not compatible.	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Video Relay Service is not designed to connect an inbound video caller with the called party with uses voice, TTY user, VCO, HCO or anything other than video because videoconferen cing via internet or ISDN protocols are



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174.75.5	Regulatory	Technology	Steps Taken	Regulatory	Technology	Steps Taken
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			Requirement			requirement
						not compatible.
						compatible.
12. VCO - to - VCO	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Internet Relay Service is not designed to connect an inbound internet caller with the called party who uses TTY user or VCO as communicatio n between internet and baudot protocols are not compatible.	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Video Relay Service is not designed to connect an inbound video caller with the called party with uses voice, TTY user, VCO, HCO or anything other than video because videoconferen cing via internet or ISDN protocols are not compatible.
13. HCO – to – HCO	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Internet Relay Service is not designed to connect an inbound internet caller with the called party who uses TTY user or HCO as communicatio n between internet and baudot protocols are not compatible.	Waived through 1/1/08	As explained in number three above, voice quality over the internet is not universally effective at this time.	Sprint's Video Relay Service is not designed to connect an inbound video caller with the called party with uses voice, TTY user, VCO, HCO or anything other than video because videoconferen cing via internet or ISDN protocols are not compatible.
14. Call Release	Waived through 1/1/08	An Internet Relay caller utilizes IP data to place an inbound call. The Call operator connects the	It is not technically feasible at this time to provide call release features with	Waived through 1/1/08	A VRS customer utilizes a video connection to make an inbound call. The VRS operator utilizes a voice channel	It is not technically feasible at this time to provide call release features with



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		outbound dialing voice call utilizing Signaling System 7 (SS7). Since these two types of calls are not compatible, the call release feature is not technically feasible.	Internet Relay calls. However, Sprint will continue to investigate new developments to allow Internet Relay customers to use this feature.		(SS7) to make an outbound dial. Because the two types of calls are not compatible, the call release feature is not technically feasible. Also, in the VRS environment, we are currently unable to remove the Video Interpreter agent from the middle of the call when the inbound video caller reaches an outbound customer who also has video capability.	Video Relay calls. However, Sprint will continue to investigate new developments to allow Video Relay customers to use this feature.
15. 3- way Calling	Waived through 1/1/08	The current Internet Relay call environment does not support the capability to perform three- way calling initiated call from agent via Sprint IP.	It is possible for the customer to initiate a three-way call if he/she has conference calling capability. In this case, the operator does not needed to perform the three-way calling function. However, the limitation is that Sprint's Internet Relay Service will handle only one TTY user (and unlimited number of voice users) when using three-way calling via relay service.	Waived through 1/1/08	At this time, it is not technically feasible to provide a 3-way Video Relay call. Customers using VRS do not have the web-enabled ability to initiate 3-way video calls because of the limitations of end user equipment. Features of customer premise equipment are not under the control of the VRS provider, and therefore the VRS provider cannot control the establishment of a three-way call.	The voice customer is currently able to use the LEC-provided three-way calling feature. One or two of the three legs of the call can be engaged as they would without VRS being a part of the call. VRS is transparent to this process. The VRS agent who receives an inbound video connection has the ability to out dial to multiple voice parties to create a three-way call of which two



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			Requirement			
16. Speed Dialing		Sprint's current Speed Dial system is supported by	to Meet the Requirement It is possible to have 2-Line VCO via Sprint IP using userinitiated three-way calling.  Customers can maintain their own speed dial list		This service is currently available for VRS customers who	to Meet the requirement parts are voice and one part is video. The VRS agent platform is however, unable to support a three way call between two video customers and one voice user at this time.  Individuals using TV-based videophones
		ANI driven customer profile. Without being able to identify the customer's ANI, Sprint is not able to access the preferred speed dial list.	on their computer and paste the phone number on the web prior to the call. The phone number will be prepopulated to agent's dialing window for efficient call processing.		choose to use our webcam based product. They can create a speed dial list online and greatly improve the efficiency and connect time with the outbound party through the Video Interpreter. Individuals using TV-based videophones do not have this web enabled ability to speed dial through VRS because of the limitations of this type of end user equipment. Features of customer premise equipment are beyond the control of the VRS provider and determine how the customer can interact with Sprint's platform.	do not have this web- enabled ability to speed dial through VRS because of the limitations of this type of end user equipment. Features of customer premise equipment are beyond the control of the VRS provider and determine how the customer can interact with Sprint's platform.



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17. Providing Service 24/7	NA	NA	NA	NA	NA	NA

